## PATENT ABSTRACTS OF JAPAN

(11)Publication number:

10-232641

(43) Date of publication of application: 02.09.1998

(51)Int.CI.

G09G 3/20

G02F 1/133 G02F 1/133

G09G 3/36

(21)Application number: 09-048533 (71)Applicant: CANON INC

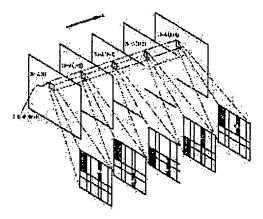
(22) Date of filing:

18.02.1997 (72)Inventor: HAMANAKA AKIYOSHI

## (54) PICTURE DISPLAY DEVICE

## (57)Abstract:

PROBLEM TO BE SOLVED: To suppress the generation of disturbing pattern in a flat picture part and permit a picture expression without damaging smoothness of an original picture by expressing a picture by changing over sub-pixel patterns for a single or plural frames. SOLUTION: One picture element is composed of plural sub-pixels of different areas from each other displayed in binary level, and three or more number of gradation levels are expressed by sub-pixel pattern composed of a combination of the display states of the plural sub-pixels. When two or more sub-pixel patterns exist corresponding to a certain gradation level, plural frames and plural sub-pixel patterns



corresponding to the gradation levels are used for one gradation level in one picture element. Namely, since a gradation level in which a same gradation level can be expressed by each of plural sub-pixel patterns expresses the sub-pixel patterns by changing them over for a single or plural frames, it is possible to prevent or suppress generation of visibly

disturbing pattern.

## **LEGAL STATUS**

[Date of request for examination]

[Date of sending the examiner's

decision of rejection]

[Kind of final disposal of application other than the examiner's decision of rejection or application converted registration]

[Date of final disposal for application]

[Patent number]

[Date of registration]

[Number of appeal against examiner's decision of rejection]

[Date of requesting appeal against examiner's decision of rejection]

[Date of extinction of right]

Copyright (C); 1998,2003 Japan Patent Office